~~[illegible]~~

09/924,613

FILE 'HOME' ENTERED AT 09:02:39 ON 28 APR 2003

=> file biosis medline caplus wpids uspatfull
COST IN U.S. DOLLARS — SINCE FILE ENTRY: 0.21 — TOTAL SESSION: 0.21

FULL ESTIMATED COST

FILE 'BIOSIS' ENTERED AT 09:02:57 ON 28 APR 2003
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FILE 'CAPLUS' ENTERED AT 09:02:57 ON 28 APR 2003
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FILE 'USPATFULL' ENTERED AT 09:02:57 ON 28 APR 2003
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*** YOU HAVE NEW MAIL ***

=> s cationic (3a) (surfactant? or detergent?) (6a) protease (6a) buffer?
L1 5 CATIONIC (3A) (SURFACTANT? OR DETERGENT?) (6A) PROTEASE (6A) BUFFER?

=> dup rem l1
PROCESSING COMPLETED FOR L1
L2 4 DUP REM L1 (1 DUPLICATE REMOVED)

=> d l2 bib abs 1-4

L2 ANSWER 1 OF 4 USPATFULL
AN 2003:30284 USPATFULL
TI Detection of nucleic acids
IN Wangh, Lawrence, Auburndale, MA, UNITED STATES
Pierce, Kenneth, Natick, MA, UNITED STATES
Hartshorn, Cristina, Needham, MA, UNITED STATES
Rice, John, Quincy, MA, UNITED STATES
Sanchez, J. Aquiles, Framingham, MA, UNITED STATES
PA Brandeis University (U.S. corporation)
PI US 2003022231 A1 20030130
AI US 2002-242395 A1 20020912 (10)
RLI Continuation of Ser. No. US 2000-638642, filed on 14 Aug 2000, PENDING
PRAI US 1999-149013P 19990813 (60)
DT Utility
FS APPLICATION
LREP LAHIVE & COCKFIELD, 28 STATE STREET, BOSTON, MA, 02109
CLMN Number of Claims: 109
ECL Exemplary Claim: 1
DRWN 12 Drawing Page(s)
LN.CNT 3315
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Disclosed are compositions, methods, and kits useful for the detection of the presence and/or quantity of one or more chromosomes from single cells, groups of cells, or subcellular compartments. Provided is a lysis buffer for the preparation of substantially accessible nucleic acid

molecules from a single cell. Also provided are moderately-repeated highly-conserved nucleic acid sequences, and oligonucleotide primer and probe molecules which hybridize specifically thereto. Methods for the detection of the presence or quantity of one or more chromosomes from a single cell are included, as are methods for the assessment of the reliability of the results of the methods of the invention. Kits for the convenient practice of the invention are also included.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2003 ACS DUPLICATE 1
AN 2002:907069 CAPLUS
DN 138:1959
TI Compositions, methods, and kits for isolating nucleic acids using surfactants and proteases
IN Greenfield, Lawrence; Montesclaros, Luz
PA USA
SO U.S. Pat. Appl. Publ., 57 pp., Cont.-in-part of U.S. Ser. No. 724,613.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002177139	A1	20021128	US 2001-997169	20011128
US 2000-724613	A2	20001128		

AB The invention relates to compns. and methods for isolating nucleic acids from biol. samples, including whole tissue. The invention also provides kits for isolating nucleic acids from biol. samples. A method for obtaining nucleic acid from a biol. sample and binding the nucleic acid to a solid phase comprises (a) contacting the biol. sample with a disrupting **buffer**, wherein the disrupting **buffer** comprises a **protease** and a **cationic surfactant**; (b) substantially neutralizing the cationic surfactant; and (c) binding the nucleic acid to a solid phase. Genomic DNA was isolated from several rat tissues and mouse tail using a digestion soln. contg. 1 mg of Proteinase K, 1 % DTAB, 100 mM Tris-HCl (pH 8.0), 20 .mu.M ATA, and 20 mM CaCl2 and incubating for 60 min at 65.degree.. Most of the tissues were effectively digested in less than one hour. Digestion of liver, brain and kidney were about 95 % complete after one hour. Following digestion, binding soln. contg. 5 M GuSCN, 50 mM MES (pH 6.0), 20 mM EDTA, and 6 % Tween 20 was then added to each sample and the samples were placed on GF/B filter membranes for washing and recovery of DNA.

L2 ANSWER 3 OF 4 WPIDS (C) 2003 THOMSON DERWENT
AN 2003-129182 [12] WPIDS
DNC C2003-032979
TI Isolating nucleic acids from biological sample, including whole tissue, by contacting sample with **buffer** comprising **protease** and **cationic surfactant**, neutralizing **surfactant** and binding nucleic acid to solid phase.
DC A96 B04 D16
IN GREENFELD, I L
PA (PEKE) PE CORP NY
CYC 98
PI WO 2002090539 A2 20021114 (200312)* EN 129p
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZM ZW

09567863

ADT WO 2002090539 A2 WO 2001-US45071 20011128
PRAI US 2000-724613 20001128
AN 2003-129182 [12] WPIDS
AB WO 200290539 A UPAB: 20030218
NOVELTY - Obtaining nucleic acid from a biological sample and binding the nucleic acid to a solid phase, comprises contacting the biological sample with a disrupting **buffer** which comprises a **protease** and a **cationic surfactant**, substantially neutralizing the **cationic** surfactant, and binding the nucleic acid to a solid phase.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a kit for obtaining a nucleic acid from a biological sample, comprising a protease, cationic surfactant and second surfactant which neutralizes the cationic surfactant, and optionally a non-ionic surfactant which permits the binding of nucleic acid to a solid phase in the presence of the **protease** and **cationic surfactant**, and a **buffer** with a high salt concentration.

USE - The method is useful for obtaining nucleic acids from biological samples (claimed), including whole tissue.

ADVANTAGE - The method reduces the time needed for sample preparation, decreases potential safety risks posed by multi-step procedures that require repeated sample manipulation and/or provide high integrity (i.e. minimally degraded) high molecular weight nucleic acid.
Dwg.0/30

L2 ANSWER 4 OF 4 USPATFULL
AN 1999:137008 USPATFULL
TI Detergent-stable alkaline protease from bacillus pumilus
IN Damodaran, Srinivasan, Madison, WI, United States
Han, Xiao-Qing, Madison, WI, United States
PA Wisconsin Alumni Research Foundation, Madison, WI, United States (U.S. corporation)
PI US 5976859 19991102
AI US 1996-751070 19961115 (8)
DT Utility
FS Granted
EXNAM Primary Examiner: Weber, Jon P.
LREP DeWitt Ross & Stevens SC
CLMN Number of Claims: 8
ECL Exemplary Claim: 6
DRWN 18 Drawing Figure(s); 15 Drawing Page(s)
LN.CNT 1083
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A detergent stable alkaline protease, its use and a method for producing the protease are described. The protease is isolated from Bacillus pumilus. The protease according to the invention is suitable for use in compositions for cleaning and washing purposes.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d l2 4 kwic

L2 ANSWER 4 OF 4 USPATFULL
DETD . . . such as SDS. It should also be noted that protease Q was relatively more stable in 5% HTAB than in **buffer** alone, implying that, like calcium ions, **cationic detergents** may stabilize the conformation of **protease** Q and protect it against autolysis.

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=> d his

     (FILE 'HOME' ENTERED AT 09:02:39 ON 28 APR 2003)

     FILE 'BIOSIS, MEDLINE, CAPLUS, WPIDS, USPATFULL' ENTERED AT 09:02:57 ON
     28 APR 2003
L1             5 S CATIONIC (3A) (SURFACTANT? OR DETERGENT?) (6A) PROTEASE (6A)
L2             4 DUP REM L1 (1 DUPLICATE REMOVED)

=> s CATIONIC (3A) (SURFACTANT? OR DETERGENT?) (10A) PROTEASE (10A) buffer?
L3             5 CATIONIC (3A) (SURFACTANT? OR DETERGENT?) (10A) PROTEASE (10A)
               BUFFER?

=> s l3 not l1
L4             0 L3 NOT L1

=>
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FILE 'HOME' ENTERED AT 11:01:31 ON 28 APR 2003

=> file biosis medline caplus wpids uspatfull

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	4.62	4.62

FILE 'BIOSIS' ENTERED AT 11:14:45 ON 28 APR 2003
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FILE 'CAPLUS' ENTERED AT 11:14:45 ON 28 APR 2003
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FILE 'USPATFULL' ENTERED AT 11:14:45 ON 28 APR 2003
CA INDEXING COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

*** YOU HAVE NEW MAIL ***

=> s cationic (surfactant? or detergent?)(5a) nucleic acid?
MISSING OPERATOR 'CATIONIC (SURFACTANT'
The search profile that was entered contains terms or
nested terms that are not separated by a logical operator.

=> s cationic (2a)(surfactant? or detergent?)(5a) nucleic acid?
4 FILES SEARCHED...
L1 79 CATIONIC (2A)(SURFACTANT? OR DETERGENT?)(5A) NUCLEIC ACID?

=> s cationic surfactant? (4a) buffer?
L2 87 CATIONIC SURFACTANT? (4A) BUFFER?

=> s l1 and l2
L3 3 L1 AND L2

=> d l3 bib abs 1-3

L3 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2003 ACS
AN 1998:535866 CAPLUS
DN 129:146060
TI Thin film of nucleic acid polymers having patterns, its manufacture, and compositions for the manufacture
IN Ijiro, Kuniharu; Shimomura, Masashi; Orloff, kartheus
PA Foundation for Scientific Technology Promotion, Japan
SO Jpn. Kokai Tokkyo Koho, 3 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10219008	A2	19980818	JP 1997-21477	19970204
PRAI	JP 1997-21477		19970204		

AB The thin film, useful as materials for mutagen sensors, mol. devices, etc., are manufd. by dissolving polyion complexes formed from

nucleic acids polymers and hydrophobic **cationic surfactants**, spreading the solns. over solid surface, and drying the solns. DNA derived from bovine thymus was ultrasonicated in H2O and the cleaved DNA soln. was mixed with a soln. of a **cationic surfactant** dispersed in HEPES **buffer** at room temp. to give ppt., which was freeze-dried. The freeze-dried powder was dissolved in CHCl3, and the soln. was cast on a mica and then dried at 40.degree. and relative humidity 87% to give a DNA thin film having honeycomb pattern at the center and line pattern at the edge in fluorescence microscopic examn.

L3 ANSWER 2 OF 3 WPIDS (C) 2003 THOMSON DERWENT
AN 2003-129182 [12] WPIDS
DNC C2003-032979
TI Isolating nucleic acids from biological sample, including whole tissue, by contacting sample with **buffer** comprising protease and **cationic surfactant**, neutralizing **surfactant** and binding **nucleic acid** to solid phase.
DC A96 B04 D16
IN GREENFELD, I L
PA (PEKE) PE CORP NY
CYC 98
PI WO 2002090539 A2 20021114 (200312)* EN 129p
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZM ZW
ADT WO 2002090539 A2 WO 2001-US45071 20011128
PRAI US 2000-724613 20001128
AN 2003-129182 [12] WPIDS
AB WO 200290539 A UPAB: 20030218
NOVELTY - Obtaining nucleic acid from a biological sample and binding the nucleic acid to a solid phase, comprises contacting the biological sample with a disrupting buffer which comprises a protease and a cationic surfactant, substantially neutralizing the **cationic surfactant**, and binding the **nucleic acid** to a solid phase.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a kit for obtaining a nucleic acid from a biological sample, comprising a protease, cationic surfactant and second surfactant which neutralizes the cationic surfactant, and optionally a non-ionic surfactant which permits the binding of nucleic acid to a solid phase in the presence of the protease and **cationic surfactant**, and a **buffer** with a high salt concentration.

USE - The method is useful for obtaining nucleic acids from biological samples (claimed), including whole tissue.

ADVANTAGE - The method reduces the time needed for sample preparation, decreases potential safety risks posed by multi-step procedures that require repeated sample manipulation and/or provide high integrity (i.e. minimally degraded) high molecular weight nucleic acid.
Dwg.0/30

L3 ANSWER 3 OF 3 USPATFULL
AN 2002:314662 USPATFULL
TI Compositions, methods, and kits for isolating nucleic acids using surfactants and proteases
IN Greenfield, Lawrence, San Mateo, CA, UNITED STATES
Montesclaros, Luz, Pittsburg, CA, UNITED STATES
PI US 2002177139 A1 20021128
AI US 2001-997169 A1 20011128 (9)

09567863

RLI Continuation-in-part of Ser. No. US 2000-724613, filed on 28 Nov 2000, PENDING
DT Utility
FS APPLICATION
LREP Finnegan, Henderson, Farabow,, Garrett & Dunner, L.L.P., 1300 I Street, N.W., Washington, DC, 20005-3315
CLMN Number of Claims: 64
ECL Exemplary Claim: 1
DRWN 32 Drawing Page(s)
LN.CNT 2457
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention relates to compositions and methods for isolating nucleic acids from biological samples, including whole tissue. The invention also provides kits for isolating nucleic acids from biological samples.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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=> d his

(FILE 'HOME' ENTERED AT 11:01:31 ON 28 APR 2003)

FILE 'BIOSIS, MEDLINE, CAPLUS, WPIDS, USPATFULL' ENTERED AT 11:14:45 ON 28 APR 2003

L1 79 S CATIONIC (2A)(SURFACTANT? OR DETERGENT?)(5A) NUCLEIC ACID?
L2 87 S CATIONIC SURFACTANT? (4A) BUFFER?
L3 3 S L1 AND L2

=> s l2 and nucleic acid (3a) (extraction? or releas? or purification?)
L4 1 L2 AND NUCLEIC ACID (3A) (EXTRACTION? OR RELEAS? OR PURIFICATIO N?)

=> d l4 bib abs

L4 ANSWER 1 OF 1 USPATFULL
AN 2002:314662 USPATFULL
TI Compositions, methods, and kits for isolating nucleic acids using surfactants and proteases
IN Greenfield, Lawrence, San Mateo, CA, UNITED STATES
Montesclaros, Luz, Pittsburg, CA, UNITED STATES
PI US 2002177139 A1 20021128
AI US 2001-997169 A1 20011128 (9)
RLI Continuation-in-part of Ser. No. US 2000-724613, filed on 28 Nov 2000, PENDING
DT Utility
FS APPLICATION
LREP Finnegan, Henderson, Farabow,, Garrett & Dunner, L.L.P., 1300 I Street, N.W., Washington, DC, 20005-3315
CLMN Number of Claims: 64
ECL Exemplary Claim: 1
DRWN 32 Drawing Page(s)
LN.CNT 2457
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention relates to compositions and methods for isolating nucleic acids from biological samples, including whole tissue. The invention also provides kits for isolating nucleic acids from biological samples.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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